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EXAMINER

FERGUSON, KEITH

| ART UNIT | PAPER NUMBER |
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2683

DATE MAILED: 08/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/700,585

**Applicant(s)**

LIPSANEN ET AL.

**Examiner**

Keith T. Ferguson

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Specification*

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### *Drawings*

2. The drawings are objected to because fig. 1, reference numbers 1,2,6,8,9,10,11 needs a reference label to describe each component. Fig. 3, reference numbers 1 and 10 needs a reference label to describe each component. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1,4-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainey et al. in view of Buscher et al..

Regarding claim 1, Rainey et al. discloses a method of providing information (accounting information) relating to a telecommunication call in a telecommunication network to a data storage system (central automatic message account system (CAMA) or local automatic message account system (LAMA) (col. 2 lines 12-18), the method comprising: receiving caller identity information at an exchange of the network during a call set-up procedure between a calling device and the exchange (inherent, as the End Office (LAMA) receives and stores the calling party number, the called party number, date, time and call rate, as taught in prior art, fig. 1 and col. 3 lines 42-55), and storing the information (call routing set up) at least temporarily at the exchange (before upstream transmission) (col. 2 lines 52-63 and col. 3 lines 45-55); sending an incoming call alert message to a called device (col. 6 lines 10-21); in direct response to receipt of a call answer message (col. 6 lines 21-28) and updating billing data within a written automatic accounting record for the call (col. 5 lines 66-67 and col. 6 lines 1-5). Rainey et al. further discloses a fixed access Network (fig. 2) in which telephone device is coupled to the exchange via land lines (fig.2). Rainey et al. differs from claim 1 of the

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present invention in that it does not explicit disclose outputting from the exchange to said data storage system a Call Data Record containing at least the received and stored caller identity information. Buscher et al. teaches outputting from the exchange (originating toll switch) (fig. 1 number 50) to a data storage system (billing system) (fig. 1 number 260) a Call Data Record (call record) containing at least the received and stored caller identity information (col. 2 lines 55-67 and col. 3 lines 1-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. with outputting from the exchange to said data storage system a Call Data Record containing at least the received and stored caller identity information in order for a billing center to determine the cost of the call based upon the automatic message accounting record received from the End Office which tracks the progress of the call, as taught by Buscher et al..

Regarding claim 4, Rainey et al. discloses a method of providing information as discussed supra in claim 1 above. Rainey et al. differs from claim 4 of the claimed invention in that it does not disclose outputting from the exchange the callers telephone number (A number). Buscher et al. teaches

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outputting from the exchange the callers telephone number (A number (col. 2 lines 55-61)). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made To provide Rainey et al. with outputting from the exchange the callers telephone number (A number) in order to identify and properly bill the calling party who is making the call; as taught by Buscher et al..

Regarding claims 5 and 7, Rainey et al. discloses a method of providing information as discussed supra in claim 1 above and claim 6 below. Rainey et al. differs from claims 5 and 7 of the claimed invention in that it does not explicit disclose outputting said call record to an external billing system (data storage system). Buscher et al. teaches outputting said call record to an external billing system (data storage system) (fig. 1 numbers 50 and 260 and col. 2 lines 55-67 and col. 3 lines 1-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. with outputting said call record to an external billing (data storage system) system in order to reduce accounting duties within the End Office, and bill the calling party from the automatic message accounting record received from

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the End Office to form a telephone bill, as taught by Buscher et al..

Regarding claim 6, Rainey et al. discloses an apparatus (figs. 2 and 3) for providing information relating (billing details) to a telecommunication call in a telecommunication network to a data storage system (local automatic message accounting or LAMA) (col. 4 lines 28-34), the apparatus comprising: first receiving means for receiving caller identity information at an exchange of the network during a call set-up procedure between a calling device and the exchange (inherent, as the End Office (LAMA) receives and stores the calling party number, the called party number, date, time and call rate, as taught in prior art, fig. 1 and col. 3 lines 42-55), and storing the information at least temporary at the exchange (inherent, the caller information, day, time, and called information is store and sent downstream to a billing system for calculation, as taught in col. 2 lines 52-53 and col. 3 lines 45-55), transmitting means (9) (an ISUP message follows the switch node chain) (fig. 3 ISUP MSG'S) for transmitting an incoming call alert message to a called device (col. 5 lines 40-56); second receiving means for receiving (answer message sent back to the originating switch node) (fig. 3 and col. lines 63-65), in the

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event that the called device answers or otherwise accepts the incoming call alert (col. 5 lines 60-65), a call answer message sent to the exchange (originating switch) (col. 5 lines 60-65); a response to receipt of said call answer message, from the exchange to said data storage system (col. 5 lines 66-67 and col. 6 lines 1-5), a Call Data Record (automatic message account record) containing at least the received information to properly bill the call in a downstream process (col. 6 lines 1-5).

Rainey et al. further discloses said first receiving (col. 3 lines 42-55) and second receiving means (receiving an ANM, col. 5 lines 63-65), said transmitting means (transmitting an ISUP MSG'S and col. 5 lines 40-65) are provided as an integral part of the network exchange (fig. 3). Rainey et al. differs from claim 6 of the present invention in that it does not explicit disclose outputting means for outputting, from the exchange to said data storage system a Call Data Record containing at least the received and stored caller identity information. Buscher et al. teaches outputting caller information (outputting means) (col. 2 lines 63-65) from the exchange (originating toll switch) (fig. 1 number 50) to a (billing system) (data storage system) (fig. 1 number 260) a Call Data Record (call record) containing at least the received and stored caller identity information (col. 2 lines 55-67 and col. 3 lines 1-7).



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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. with outputting means for outputting, from the exchange to a data storage system a Call Data Record containing at least the received and stored caller identity information in order to properly bill the calling party to form a telephone bill based upon the call information received in the automatic message accounting record, as taught by Buscher et al..

Regarding claim 9, Rainey et al. discloses a telecommunication network (figs. 2 and 3) having a plurality of interconnected exchanges (End Offices) (EO-3 to EO4) for routing calls in the network (col. 2 lines 12-27), and a billing system (billing nodes) coupled to each of said exchanges (col. 5 lines 33-36), each exchange comprising: first receiving means for receiving caller identity information at an exchange of the network during a call set-up procedure between a calling device and the exchange (inherent, as the End Office (LAMA) receives and stores the calling party number, the called party number, date, time and call rate which sent through different exchanges to a billing system node for calculation, as taught in prior art, fig. 1 and col. 3 lines 42-55 and col. 5 lines 40-55), and storing the information at least temporary at the exchange (inherent, the

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caller information, day, time, and called information is store and sent downstream to a billing system or through each exchange to a billing system for calculation, as taught in col. 2 lines 52-53, col. 3 lines 45-55 and col. 5 lines 40-55), transmitting means (9) (an ISUP message follows the switch node chain) (fig. 3 ISUP MSG'S) for transmitting an incoming call alert message to a called device (col. 5 lines 40-56), second receiving means for receiving (answer message sent back to the originating switch node) (fig. 3 and col. lines 63-65), in the event that the called device answers or otherwise accepts the incoming call alert (col. 5 lines 60-65), a call answer message sent to the exchange (originating switch) (col. 5 lines 60-65); a response to receipt of said call answer message, from the exchange to said data storage system (col. 5 lines 66-67 and col. 6 lines 1-5), a Call Data Record (automatic message account record) containing at least the received information to properly bill the call in a downstream process (col. 6 lines 1-5). Rainey et al. differs from claim 9 of the present invention in that it does not disclose outputting means for outputting, from the exchange to said data storage system a Call Data Record containing at least the received and stored caller identity information. Buscher et al. teaches outputting caller information (outputting means) (col. 2 lines 63-65) from the exchange (originating toll

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switch)(fig. 1 number 50) to a data storage system (external billing system) (fig. 1 number 260) a Call Data Record (call record) containing at least the received and stored caller identity information (col. 2 lines 55-67 and col. 3 lines 1-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. with outputting means for outputting, from the exchange to said data storage system a Call Data Record containing at least the received and stored caller identity information in order to reduce duties within each End Office, speed up processing and switching within each End Office, and to properly bill the calling party from all the End offices incase of redirection of the call after call setup, as taught by Buscher et al..

5. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainey et al. in view of Buscher et al. as applied to claims 1 and 6 above and in further view of Amin et al..

Regarding claim 2, the combination of Rainey et al. and Buscher et al. differs from claim 2 of the present invention in that they do not disclose a cellular radio telephone network and the call is made from a cellular radio telephone device. Amin

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et al. teaches a cellular radio telephone network (fig.1) and the call is made from a cellular radio telephone device (fig. 1 number 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. and Buscher et al. with a cellular radio telephone network and the call is made from a cellular radio telephone device in order to provide wireless telephone switching, wireless tracking, and to monitor the cellular radio telephone device wireless usage for billing when communicating with a land line telephone, as taught by Amin et al..

Regarding claim 8, the combination of Rainey et al. and Buscher et al. differs from claim 8 of the present invention in that they do not disclose a cellular radio telephone network and said exchange being a Mobile Switching Centre (MSC) of the cellular network. Amin et al. teaches a cellular radio telephone network (fig. 1) and said exchange being a Mobile Switching Centre (MSC) of the cellular network (fig. 1 number 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Rainey et al. and Buscher et al. with a cellular radio telephone network and said exchange being a Mobile Switching Centre (MSC) of the cellular network in order to provide wireless switching

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and tracking within a wireless telephone system, and for coordinating billing reports for wireless telephone service between a wireless subscriber and wire line subscriber, as taught by Amin et al..

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rainey et al. in view of Buscher et al. and Amin et al. as applied to claims 1 and 2 above and in further view of Plush et al..

Regarding claim 3, the combination of Rainey et al., Buscher et al. and Amin et al. differs from claim 3 of the present invention in that they do not disclose a GSM network and said exchange from which the Call Data Record is output is a Mobile Switching Center, and outputting from the Mobile Switching Center at least one of the subscriber telephone number. Plush et al. teaches a GSM network (fig. 1 and col. 3 lines 32-34) and said exchange from which the Call Data Record is output is a Mobile Switching Center (col. 3 lines 47-61 and fig. 2 numbers 2 and 16), and outputting from the Mobile Switching Center at least one of an IMSI code (col. 3 lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Rainey et al., Buscher et al. and Amin et al. with a GSM network and

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said exchange from which the Call Data Record is output is a Mobile Switching Center, and outputting from the Mobile Switching Center at least one of the subscriber telephone number is a IMSI code in order to bill a international mobile subscriber within a specific air interface/system through a wireless mobile switch which a bill is produced and sent to the identified caller based upon its wireless usage, as taught by Plush et al..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

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Keith Ferguson 

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August 11, 2003